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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,850	03/21/2001	Satoshi Iwata	122.1446	1447

21171 7590 06/30/2005

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EXAMINER	
KLINGER, SCOTT M	
ART UNIT	**PAPER NUMBER**
2153	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/812,850	IWATA ET AL.	
	Examiner	Art Unit	
	Scott M. Klinger	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-20 are pending.

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection, necessitated by amendments.

Claim Rejections - 35 USC § 112

Claims 3, 8-10, 12-14, and 16-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

The use of the term *"hierarchy"* is used to describe not only the hierarchy itself, but also the elements of the hierarchy. It is suggested that the term *"sub-division"* or *"portion"* be used instead of the term *"hierarchy"* where it would be appropriate.

In referring to claim 3, it is unclear as to the meaning of the phrases *"a data file constituted by part of information in an image"* and *"a page constitutes a unit."*

In referring to claim 8, it is unclear as to the meaning of the phrase *"an image of a green element of a color image."*

In referring to claim 10, it is suggested that the word *"configures"* be changed to *"generates."*

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Kobayashi (U.S. Patent Number 6,633,759, hereinafter "Kobayashi"). Kobayashi discloses a communication system, and mobile communication device, portable information processing device, and data communication method used in the system. Kobayashi shows,

In referring to claims 1, 4, and 5,

- A portable server division, that can be carried in a container by a user:
  Kobayashi, Fig. **9** shows a portable server division **1**, that can be carried in a container (i.e. *"a briefcase"*) by a user
- The portable server division transmitting and receiving book-type contents having page-by-page information containing at least either images or characters:
  "The software referred to herein includes, in case of the PC 1, application software installed in the PC 1, such as word processing software" (Kobayashi, col. 4, lines 34-36)
- A portable viewer division, that can be carried by the user carrying said portable server division, for displaying said book-type contents transmitted from said server division page by page:
  Kobayashi, Fig. **9** shows a portable viewer division **2**

In referring to claim 2,

The viewer division comprises,

- A display panel for displaying said book-type contents page by page and a display memory for storing page-by-page information that is to be displayed on said display panel:

  Kobayashi, Fig. **4** shows a display panel **43** on the viewer division
- A first wireless interface module:

  Kobayashi, Fig. **4** shows a first wireless interface module **30** on the viewer division
- A first battery for supplying power to said display panel and said display memory:

  Kobayashi, Fig. **9** shows the viewer division is a cell phone, which includes *"a battery checking function"* (Kobayashi, col. 3, lines 17-18)

The server division comprises,

- A disk for storing said book-type contents; a computer processing unit for creating page-by-page information from said book-type contents stored in said disk:

  Kobayashi, Fig. **3** shows the application(s) **27** are stored in memory; Kobayashi, Fig. **2** shows a computer processing unit **17**
- A second wireless interface module for performing wireless communications with said first wireless interface module of said viewer division:

  Kobayashi, Fig. **2** shows a second wireless interface module **7**
- A second battery for supplying power to said disk, said second wireless interface module and said computer-processing unit:

  A portable computer that is able to operate while in a briefcase inherently implies a battery

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 6, 7, 12, 15-17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Kikinis (U.S. Patent Number 6,553,410, hereinafter "Kikinis"). Although Kobayashi shows substantial features of the claimed invention, Kobayashi is silent as to how the image data is transferred from the server (notebook pc) to the client (cellular phone). Kobayashi does not explicitly show converting the data to be displayed into a new format. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Kobayashi as evidenced by Kikinis.

In analogous art, Kikinis discloses tailoring data and transmission protocol for efficient interactive data transactions over wide-area networks. A person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Kobayashi so as to run the proxy server software on the server, such as taught by Kikinis, in order to take advantage of the faster network capabilities of the notebook PC and format the data for display on a smaller screen while browsing the Internet.

In referring to claim 3, Kobayashi in view of Kikinis shows,

- Said computer processing unit consisting of said server division converts a data file having at least one of a document layout, document information, character information and image information into an intermediate data file constituted by part of information in an image in which a page constitutes a unit and transfers said intermediate data file so converted to said viewer division using said second wireless interface:

  Kikinis, Fig. **4** shows converting an HTML file (from step **89**) into a new layout as an HTL file (in step **99**) and sending said HTL file over the wireless interface in step **105**.
- Said viewer division displays a page-by-page image by describing said intermediate data file in said display memory:

  Kikinis, Fig. **4** shows displaying the page-by-page image in step **107**.

In referring to claim 6, Kobayashi in view of Kikinis shows,

- Said intermediate data file is constituted by a plurality of hierarchies, whereby said intermediate data file is sequentially transferred hierarchy by hierarchy in transferring images:

  "In various embodiments of the present invention, hand-held devices with CPUs having an ability to run at from 0.001 to 0.05 MIPs can serve as WEB browsers, displaying WEB pages and allowing users to initiate on-screen links and to input data into input fields." (Kikinis, col. 8, lines 34-38)

  The intermediate data files allow the users to initiate on-screen links and are therefore constituted by a plurality of hierarchies
- Said viewer division describes said intermediate data file in said display memory every time said intermediate data is transferred thereto:

  Kikinis, Fig. **4** shows displaying the intermediate data file in step **107**.

In referring to claim 7, Kobayashi in view of Kikinis shows,

- Said intermediate data file is configured by layering character information of original image information in accordance with the size of character font, so that priority in transfer is granted to intermediate data files in which larger-sized characters are layered:

  The system of Kikinis translates an HTML file to HTL inherently implying layering character information of original image information in accordance with the size of character font

In referring to claim 12 (as understood), Kobayashi in view of Kikinis shows,

- Said portable viewer division has a compressed data decompressing function, wherein a page image in which a page constitutes a unit is data compressed at said portable server division:

  "At step 101 the Proxy-Server converts all of the jpg files to a dithered bitmap format according to information associated with the user ID received from the hand-held at log-on. This ID establishes the size and resolution of the hand-held's display, for example,

and the bitmap created from the jpg files is scaled to the hand-held's display." (Kikinis, col. 11, lines 22-27)

- After transferring said compressed image, said transferred compressed image is expanded for display by said compressed data decompressing function at said viewer division. Kikinis, Fig. **4** shows displaying the compressed image at step **107**.

In referring to claim 15, Kobayashi in view of Kikinis shows,

- Said viewer division has its own specific identification number, wherein said identification number is registered in advance in said server division:
  "At step 61 the user logs on by entering a user name and password and the field unit identifies itself with its ID. At step 63 the Proxy-Server compares the entered password and ID with stored records, and derives a signature for the unit. At step 65 the Proxy-Server decides whether the information is correct." (Kikinis, col. 10, lines 47-52)
- Said identification number is described in an intermediate data file, whereby when the identification number of an intermediate data file sent to said viewer division coincides with the identification number that said viewer division possesses, the data is described in said display memory:
  "If the Log-On is valid, control passes to step 67, and the Proxy-Server acknowledges the successful log-on to the hand-held unit at step 69." (Kikinis, col. 10, lines 52-54)

In referring to claim 16 (as understood), Kobayashi in view of Kikinis shows,

- Said viewer division has its own specific identification number, wherein said identification number is registered in advance in said server division:
  Kikinis, col. 10, lines 47-52 (see full quote above)
- Said identification number is described in an intermediate data file, whereby when the identification number of an intermediate data file sent to said viewer division coincides with the identification number that said viewer division possesses, hierarchical data on a lower layer is described in said display memory:
  Kikinis, col. 10, lines 52-54 (see full quote above)

In referring to claim 17 (as understood), Kobayashi in view of Kikinis shows,

- A signal comprising the identification number of said viewer division is transmitted from said viewer division to said server division:
  Kikinis, col. 10, lines 47-52 (see full quote above)
- When said signal is received at said server division, said signal is collated with the identification number of a viewer registered therein and wherein when said collation determines that said identification numbers coincide with each other, a publication signal is described in an intermediate data file:
  "An ID match when connecting a hand-held unit to the Proxy-Server provides the Proxy-Server with information about the hand-held unit, such as CPU type and power, screen size, type and resolution, presence of a pointer device, and sound capability." (Kikinis, col. 8, lines 15-19)
  Kikinis, col. 10, lines 52-54 (see full quote above)

In referring to claim 19 (as understood), Kobayashi in view of Kikinis shows,

- A signal comprising the identification number of said viewer division is transmitted from said viewer division to said server division:
  Kikinis, col. 10, lines 47-52 (see full quote above)
- When said signal is received at said server division, said signal is collated with the identification number of a viewer registered therein and wherein when said collation determines that said identification numbers coincide with each other, a publication signal is described in an intermediate data file:
  Kikinis, col. 8, lines 15-19 (see full quote above), *Kikinis, col. 10, lines 52-54* (see full quote above)

Claim 9 (as understood) is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Kikinis and in further view of Helfman (U.S. Patent Number 6,119,135, hereinafter "Helfman"). Although Kikinis in view of Nguyen shows substantial features of the

claimed invention, Kobayashi in view of Kikinis does not explicitly show priority in transfer is given to intermediate data files on said hierarchies of image portions. Nonetheless this feature is well known in the art and would have been an obvious design choice for the system disclosed by Kobayashi in view of Kikinis as evidenced by Helfman.

In analogous art, Helfman discloses a method for passively browsing the Internet using images extracted from web pages. Helfman shows: *"The system maintains a mapping list that maps the universal resource locator (URL) of the displayed web page images to the URL of the web page containing those images. When a user selects a displayed image, the user's browser is driven to the associated web page, so that the user can view the web page in its entirety."* (Helfman, col. 1, lines 42-47)

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Kobayashi in view of Kikinis so as to transfer an image of a web page before the text, such as taught by Helfman, in order to preview a web page without fully downloading the pages data.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Kikinis and in further view of Kunkel et al. (U.S. Patent Number 6,477,579, hereinafter "Kunkel"). Although Kobayashi in view of Kikinis shows substantial features of the claimed invention, Kobayashi in view of Kikinis does not show the viewer writes in said display memory for each address which is a certain interval away from a transferred intermediate data file. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Kobayashi in view of Kikinis as evidenced by Kunkel.

In analogous art, Kunkel discloses an access system and method for providing interactive access to an information source through a networked distribution system. Kunkel shows storing HTML data from the hyperlinks in the current web page: *"In the operation of the channel hyperlinking system 10, each of the headends 14 preferably pre-caches from the ISP 30, the HTML data pertaining to the channel hyperlinks associated with upcoming programming prior to the broadcasts, and stores this information in the cache 31."* (Kunkel, col. 12, lines 45-49)

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Kobayashi in view of Kikinis so as to pre-cache data that is an interval away from the intermediate data file, such as taught by Kunkel, in order to speed up the response to an activated link.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Kikinis and in further view of Marmor (U.S. Patent Number 6,601,108, hereinafter "Marmor"). Although Kobayashi in view of Kikinis shows substantial features of the claimed invention, including the system of claim 6 (see 103 rejection above), Kobayashi in view of Kikinis does not show said intermediate data file is configured by converting character information into a binary image. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Kobayashi in view of Kikinis as evidenced by Marmor.

In analogous art, Marmor discloses an automatic conversion system. Marmor shows said intermediate data file is configured by converting character information into a binary image: *"In a preferred embodiment of the invention, data from the server which cannot normally be displayed on the client is converted, by the automatic converter, into image files for display on the client. Preferably, text data for which there is no available font on the client is converted in image data, for example GIF format data."* (Marmor, col. 5, lines 8-13)

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Kobayashi in view of Kikinis so as to convert character information into a binary image, such as taught by Marmor, in order to allow the client to display characters from an unsupported character set.

Claims 13, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Kikinis and in further view of Jungck (U.S. Patent Number 6,728,785, hereinafter "Jungck").

In referring to claim 13 (as understood), although Kobayashi in view of Kikinis shows substantial features of the claimed invention, including the system of claim 1 (see 102 rejection above), Kobayashi in view of Kikinis does not show said viewer division has a compressed data decompressing function, wherein an intermediate data file in which a page image, in which a page constitutes a unit, is layered is data compressed at said server division, wherein after said compressed intermediate data file has been transferred, said transferred compressed image is expanded by said compressed data decompressing function at said viewer division. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Kobayashi in view of Kikinis as evidenced by Jungck.

In analogous art, Jungck discloses a system and method for dynamic compression of data. Jungck shows compressing data at the server division and decompressing the data at the viewer division: *"The present invention intercepts web page requests then compresses the web page, which is usually an HTML file, and sends it to the requesting workstation in the compressed format. The requesting workstation then decompresses the web page before processing the web page."* (Jungck, col. 3, line 67 – col. 4, line 5)

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Kobayashi in view of Kikinis so as to compress data at the server and decompress the data at the viewer, such as taught by Jungck, in order *"to reduce the time required to transfer files."* (Jungck, col. 1, lines 18-19)

In referring to claim 18 (as understood), although Kobayashi in view of Kikinis shows substantial features of the claimed invention, including:

- The system of claim 12 (see rejection above),
- Said viewer division has its own specific identification number, wherein said identification number is registered in advance in said portable server division:
  Kikinis, col. 10, lines 47-52 (see full quote above)
- Said identification number is described in an intermediate data file, whereby when the identification number of an intermediate data file sent to said viewer division coincides

with the identification number that said viewer division holds a notification is displayed on the viewer division:

Kikinis, col. 10, lines 52-54 (see full quote above)

However Kobayashi in view of Kikinis does not show a compressed file is decompressed when the identification number is determined to be valid. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Kobayashi in view of Kikinis as evidenced by Jungck.

In analogous art, Jungck discloses a system and method for dynamic compression of data. Jungck shows compressing data at the server division and decompressing the data at the viewer division: *Jungck, col. 3, line 67 – col. 4, line 5* (see full quote above)

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Kobayashi in view of Kikinis so as to compress data at the server and decompress the data at the viewer, such as taught by Jungck, in order *"to reduce the time required to transfer files."* (Jungck, col. 1, lines 18-19)

In referring to claim 20 (as understood), Kobayashi in view of Kikinis in view of Jungck shows,

- Said viewer division has its own specific identification number, wherein said identification number is registered in advance in said portable server division:
  Kikinis, col. 10, lines 47-52 (see full quote above)
- Said identification number is described in an intermediate data file, whereby when the identification number of an intermediate data file sent to said viewer division coincides with the identification number that said viewer division holds, a compressed data is decompressed:
  Kikinis, col. 10, lines 52-54 (see full quote above), a system that compresses data, sends it over a wireless interface and then decompresses said data inherently implies a compressed data is decompressed when information is sent from the server to the viewer.

Claim 14 (as understood) is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Kikinis and in further view of Betts (U.S. Patent Number 4,734,920, hereinafter "Betts"). Although Kobayashi in view of Kikinis shows substantial features of the claimed invention, including the system of claim 3, Kobayashi in view of Kikinis does not show a plurality of said wireless interface modules. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Kobayashi in view of Kikinis as evidenced by Betts.

In analogous art, Betts discloses a high speed modem for multiple communication circuits. Betts, Fig. **1** shows a plurality of line interfaces on the client side (**30, 34**) and on the server side (**35, 36**).

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Kobayashi in view of Kikinis so as to have a plurality of said wireless interface modules, such as taught by Betts, in order to provide a high speed connection using multiple slow communication connections.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott M. Klinger whose telephone number is (571) 272-3955. The examiner can normally be reached on M-F 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Scott M. Klinger
Examiner
Art Unit 2153

smk

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